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EXAMINER

MILLER, BRANDON J

ART UNIT

PAPER NUMBER

2683

DATE MAILED: 11/20/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/593,158

Applicant(s)

UCHIDA, WATARU

Examiner

Brandon J Miller

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Minamisawa in view of Tiedemann.

Regarding claim 1 Minamisawa teaches a child mobile terminal that notifies a parent mobile terminal of a data transmission rate to be used by the child mobile terminal, when the child mobile terminal starts a data exchange (see col. 8, lines 13-17). Minamisawa teaches detecting a residual amount of battery power (see col. 6, lines 57-62). Minamisawa teaches input for data transmission (see col. 6, lines 24-30). Minamisawa also teaches changing a data transmission rate, based on a residual amount of battery power (see col. 4, lines 21-25 and col. 8, lines 26-31). Minamisawa does not teach notifying a base station of a data transmission rate. Tiedemann teaches notifying a base station of a data transmission rate (see abstract and col. 4, lines 14-18). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the Minamisawa adapt to include notifying a base station of a data transmission rate because this would allow for transmission power control in a continuous transmission communication system.

Regarding claim 2 Minamisawa teaches changing a data transmission rate, on the basis of a residual amount of battery power (see col. 4, lines 21-25 and col. 8, lines 26-31) and electric

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field strength (see col. 19, lines 54-60). Minamisawa also teaches receiving electric field strength of a downward signal (see col. 19, lines 54-57). Minamisawa does not teach receiving a downward signal from a base station and controlling transmission power of a upward signal from a base station depending upon an electric field strength of downward signal. Tiedemann teaches receiving a downward signal from a base station and controlling transmission power of an upward signal from a base station (see col. 4, lines 1-4 & 6-12 and FIG. 3). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the Minamisawa adapt to include receiving a downward signal from a base station and controlling transmission power of a upward signal from a base station depending upon an electric field strength of downward signal because this would allow for two-way transmission power control.

Regarding claim 3 Minamisawa teaches a table for storing prescribed battery holding times and data transmission rates (see col. 8, lines 13-17 and Fig. 5). Minamisawa teaches a mobile terminal with the highest data transmission rates (see col. 4, lines 21-24). Minamisawa teaches calculating an estimated battery holding time, on the basis of a residual amount of battery power and electric field strength (see col. 6, lines 57-62 and col. 12, lines 49-51). Minamisawa also teaches searching one of a battery holding times that is equal to an estimated holding time, reading a data transmission rate corresponding to a searched battery holding time, comparing a read-out data transmission rate, and notifying a mobile station based on the comparison (see col. 7, lines 13-20 & 58-65 and col. 8, lines 26-32). Minamisawa does not teach notifying a base station of a lower data transmission rate. Tiedemann teaches notifying a base station of a modified data transmission rate (see abstract, col. 5, lines 43-44 and col. 6, lines 11-15). It would have been obvious to one of ordinary skill in the art at the time the invention was made to

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make the Minamisawa adapt to include notifying a base station of a lower data transmission rate because this would allow for a method for carrying out data communications between mobile terminals while minimizing the consumption amount of electric energy.

Regarding claim 4 Minamisawa teaches a mobile communication system that has a plurality of data transmission rates employed (see col. 7, lines 13-14). Minamisawa teaches a plurality of mobile terminals (see abstract). Minamisawa also teaches deciding a transmission data rate of an upward signal toward a mobile station based on a residual battery power of a downward signal from a base station (see col. 4, lines 21-25 and col. 8, lines 26-31).

Minamisawa does not teach a base station for controlling data communications in a service area and executing call services, or deciding a transmission data rate of an upward signal toward a base station on the basis of transmission power of a downward signal from a base station.

Tiedemann teaches a base station for controlling data communications in a service area and executing call services (see col. 3, lines 54-60). Tiedemann also teaches deciding a transmission data rate of an upward signal toward a base station on the basis of transmission power of a downward signal from a base station (see col. 4, lines 1-4 & 6-12, col. 6, lines 11-15 and FIG. 3).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the Minamisawa adapt to include a base station for controlling data communications in a service area and executing call services and deciding a transmission data rate of an upward signal toward a base station on the basis of transmission power of a downward signal from a base station because this would allow for increased reliability in data communications by varying the data transmission rate according to the condition of a wireless signal.

Regarding claim 5 Minamisawa teaches detecting a residual amount of battery power of a mobile terminal (see col. 6, lines 57-62). Minamisawa also teaches inputting a data transmission rate (see col. 6, lines 24-30). Minamisawa does not teach notifying a base station of a data transmission rate to be used by a mobile station. Tiedemann teaches notifying a base station of a data transmission rate (see abstract and col. 4, lines 14-18). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the Minamisawa adapt to include notifying a base station of a data transmission rate to be used by a mobile station because this would allow for transmission power control in a continuous transmission communication system because this would allow for increased reliability in data communications through notification of the data transmission rate according to the battery supply of a mobile terminal.

Regarding claim 6 Minamisawa teaches generating a signal representing electric field strength (see col. 19, lines 54-60). Minamisawa teaches a data transmission rate to be used by a mobile terminal that is regulated based on a residual amount of battery power of a mobile terminal (see col. 4, lines 21-25 and col. 8, lines 26-31) and electric field strength (see col. 19, lines 54-60). Minamisawa does not teach receiving a downward signal from a base station. Tiedemann teaches receiving a downward signal from a base station (see col. 4, lines 1-4 & 6-12). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the Minamisawa adapt to include receiving a downward signal from a base station because this would allow for transmission power control in a continuous transmission communication system increased reliability in data communications by varying the data transmission rate according to the electric energy and battery supply of the mobile terminal.

Regarding claim 7 Minamisawa teaches calculating an estimated battery holding time, on the basis of a residual amount of battery power and electric field strength (see col. 6, lines 57-62 and col. 12, lines 49-51). Minamisawa reading a data transmission rate corresponding to a searched battery holding time, comparing a read-out data transmission rate, and notifying a mobile station based on the comparison (see col. 7, lines 13-20 & 58-65 and col. 8, lines 26-32). Minamisawa teaches a determining a highest data transmission rates (see col. 4, lines 21-24). Minamisawa does not teach notifying a base station of a lower data transmission rate. Tiedemann teaches notifying a base station of a modified data transmission rate (see abstract, col. 5, lines 43-44 and col. 6, lines 11-15). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the Minamisawa adapt to include notifying a base station of a lower data transmission rate because this would allow for transmission power control in a continuous transmission communication system.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hayashi U.S Patent No. 5,889,604 discloses a method of and apparatus for data communication between portable information terminals.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandon J Miller whose telephone number is 703-305-4222. The examiner can normally be reached on Mon.-Fri. 8:00 am to 5:00 pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 703-308-5318. The fax phone numbers for the

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organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

November 15, 2002


WILLIAM TROST
SUPERVISORY PATENT EXAMINER
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